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EXAMINER

HAN, JASON

ART UNIT	PAPER NUMBER
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2875

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/828,995	Applicant(s) MAHONEY, MICHAEL J.	
	Examiner Jason M. Han	Art Unit 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-66 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14, 17-21, 24-48, 51-55 and 58-66 is/are rejected.
- 7) ☒ Claim(s) 15, 16, 22, 23, 49, 50, 56 and 57 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>20041022</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:
 - a. Page 1, Line 9: Grammatical error – “There times”;
 - b. Page 2, Line 20: Typographical error – “diodes14”;
 - c. Page 3, Lines 9, 12: Typographical error – “Figure 8” should read as “Figure 11”;
 - d. Page 4, Line 19: Grammatical error – “Figures 8-9 shows” should read as “Figures 8-9 show”;Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3 and 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Putman (U.S. Patent 4985813).
3. With regards to Claim 1, Putman discloses a light emitting device including:
 - A substantially transparent spherical housing [Figure 1: (11-13)]; and
 - A circuit [Figure 1: (23); Column 3, Lines 34-36] contained within the housing, whereby the circuit includes a light emitting means [Figure 1: (21-22)], a time delay means [Column 3, Line 21; Column 4, Lines 6-8], a battery means

[Figure 1: (27)], and a switch [Column 3, Lines 19-23], which upon activation, closes the circuit providing current from the battery means.

4. With regards to Claim 2, Putman discloses the housing being generally spherical having a flat base [Figure 1: (13)].

5. With regards to Claim 3, Putman discloses the housing containing a self-righting means for causing the device, following deployment on a surface, to come to a resting position with the flat base engaging the surface [Column 3, Lines 55-58; Column 1, Lines 23-25].

6. With regards to Claim 6, Putman discloses the light emitting means illuminating within the infrared spectrum [Column 3, Lines 3-6; Column 4, Lines 8-12].

7. With regards to Claim 7, Putman discloses the housing including a first hemisphere [Figure 1: (11)] and a second hemisphere [Figure 1: (13)] attached together with fastening means [Figure 1: (12, 14, 15, 25, 26)].

8. With regards to Claim 8, Putman discloses a circuit board [Figure 1: (23)] being set between the first and second hemispheres.

9. With regards to Claim 9, Putman discloses the light emitting means, the time delay means, and the switch being mounted on the circuit board [Column 3, Lines 14-16, 34-37].

10. Claim 21 is rejected under 35 U.S.C. 102(b) as being anticipated by Putman (U.S. Patent 4985813).

11. With regards to Claim 21, Putman discloses a light emitting device including:

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- A substantially transparent spherical housing [Figure 1: (11-13)], whereby the housing includes a first hemisphere [Figure 1: (11)] and a second hemisphere [Figure 1: (13)] attached together with fastening means [Figure 1: (12, 14, 15, 25, 26)];
- A round circuit board [Figures 1, 3: (23); Column 3, Lines 34-36] set between the first and second hemispheres;
- A battery storage compartment [Figure 4] contained within the housing;
- A circuit including a light emitting means [Figure 1: (21-22)], a time delay means [Column 3, Line 21; Column 4, Lines 6-8], a battery means [Figure 1: (27)], and a switch [Column 3, Lines 19-23], which upon activation, closes the circuit providing current from the battery means; and
- Whereby the light emitting means, the time delay means, and the switch are mounted on the circuit board [Column 3, Lines 14-16, 34-37] and the battery disposed within the battery storage compartment [Figure 4; Column 3, Lines 58-59].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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12. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Putman (U.S. Patent 4985813) as applied to Claim 1 above, and further in view of Green, Sr. (U.S. Patent 6117030).

Putman discloses the claimed invention as cited above, but does not specifically teach a switch extension being configured to engage the switch such that a portion of the switch extension extends to the exterior of the housing (re: Claim 4), nor teaches a portion of the switch extension extending into a recessed section included in the exterior of the housing (re: Claim 5).

Green teaches a light emitting device including a switch extension [Figures 1-3: (18)] being configured to engage a switch [Figure 3; contacts: Column 2, Lines 1-4], whereby a portion of the switch extension extends to the exterior of a housing [Figures 1-3: (12, 14)], and wherein the exterior of the housing includes a recessed section [Figures 1-3: (20)] such that a portion of the switch extension extends into the recessed section.

It would have been obvious to one ordinarily skilled in the art at the time of invention to modify the light emitting device of Putman to incorporate the switch of Green to ensure a simple manual switch that is easily accessible and provide greater control to a user.

13. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Putman (U.S. Patent 4985813) as applied to Claim 1 above, and further in view of Nelson (U.S. Patent 6079847).

Putman discloses the claimed invention as cited above, but does not specifically teach the time delay means being programmable for energizing of the light emitting means.

Nelson teaches a light emitting device including a programmable time delay means [Column 2, Lines 13-17] for energizing a light emitting means [Figure 1: (1)].

It would have been obvious to one ordinarily skilled in the art at the time of invention to modify the light emitting device of Putman to incorporate the programmable time delay means of Nelson in order to provide greater control and selectivity with respect to the delay.

14. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Putman (U.S. Patent 4985813) as applied to Claim 1 above, and further in view of Bartleucci et al. (U.S. Patent 4780621).

Putman discloses the claimed invention as cited above, but does not specifically teach the light emitting means including a first and second set of light emitting diodes (re: Claim 11) that are not energized at the same time (re: Claim 12), but rather alternatively energized at 150 cycles per second (re: Claim 13).

Bartleucci teaches a lighting system including a first and second set of light emitting diodes that are not energized at the same time, but rather alternatively energized [Column 1, Line 57 – Column 2, Line 13]. Though Bartleucci does not specifically teach the first and second set being alternatively energized at 150 cycles per second, it remains obvious that the frequency may be applied accordingly via triac(s) and oscillator.

It would have been obvious to one ordinarily skilled in the art at the time of invention to modify the light emitting device of Putman to incorporate the first and second sets of light emitting diodes alternatively energized (e.g., 150 Hz), as taught by Bartleucci, for the commonly known benefits associated with LEDs (e.g., long life, durability, low power consumption, efficiency), as well as providing the capability of "exhibiting multiple visual effects" [see Bartleucci: Column 2, Lines 6-8].

15. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Putman (U.S. Patent 4985813).

Putman discloses the claimed invention as cited above, but does not specifically teach the battery means including a 9 volt DC battery.

However, a 9 volt DC battery is considered an obvious design choice, since it is commonly known that said 9 volt DC battery would be a sufficient source for powering the light emitting diodes. In addition, the battery means [Figures 1-4: (27)] depicted in Putman clearly portrays a source typically resembling a 9 volt battery.

16. Claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Putman (U.S. Patent 4985813) as applied to Claim 1 above, and further in view of AAPA (Applicant's Admitted Prior Art).

Putman discloses the claimed invention as cited above, but does not specifically teach the circuit including a microcontroller (re: Claim 17) packaged as a TSSOP (re: Claim 18), which includes 16 leads (re: Claim 19).

AAPA teaches, "An acceptable microcontroller 20 is a Motorola model MC68HC908QY4CDT having in-circuit re-programmable flash memory" [Page 3, Lines 4-5].

It would have been obvious to one ordinarily skilled in the art at the time of invention to modify the light emitting device of Putman to incorporate the Motorola microcontroller of AAPA in order to provide an efficient and programmable time delay means that may be selectivity varied, and thus provide greater control over the device to a user's desired preference.

17. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Putman (U.S. Patent 4985813) as applied to Claim 1 above, and further in view of Bischoff, Jr. (U.S. Patent 6158882).

Putman discloses the claimed invention as cited above, but does not specifically teach the circuit including a voltage regulator.

Bischoff teaches, "One embodiment of the present invention utilizes a voltage regulator 60 for dimming the light emitting diodes 40 and controlling illumination intensity of said diodes" [Column 5, Lines 9-11].

It would have been obvious to one ordinarily skilled in the art at the time of invention to modify the light emitting device of Putman to incorporate the voltage regulator of Bischoff into the circuitry, so as to provide greater control over the illumination and device [e.g., brightness] to a user's desired preference.

18. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Putman (U.S. Patent 4985813).

Putman discloses the claimed invention as cited above, but does not specifically teach a 9 volt DC battery being disposed within the battery storage compartment.

However, a 9 volt DC battery is considered an obvious design choice, since it is commonly known that said 9 volt DC battery would be a sufficient source for powering the light emitting diodes. In addition, the battery [Figures 1-4: (27)] disposed within the battery storage compartment depicted in Putman resembles a typical 9 volt battery.

19. Claims 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Putman (U.S. Patent 4985813) as applied to Claim 21 above, and further in view of Green, Sr. (U.S. Patent 6117030).

Putman discloses the claimed invention as cited above, but does not specifically teach a switch extension being configured to engage the switch such that a portion of the switch extension extends to the exterior of the housing (re: Claim 25), nor teaches a portion of the switch extension extending into a recessed section included in the exterior of the housing (re: Claim 26).

Green teaches a light emitting device including a switch extension [Figures 1-3: (18)] being configured to engage a switch [Figure 3; contacts: Column 2, Lines 1-4], whereby a portion of the switch extension extends to the exterior of a housing [Figures 1-3: (12, 14)], and wherein the exterior of the housing includes a recessed section [Figures 1-3: (20)] such that a portion of the switch extension extends into the recessed section.

It would have been obvious to one ordinarily skilled in the art at the time of invention to modify the light emitting device of Putman to incorporate the switch of

Green to ensure a simple manual switch that is easily accessible and provide greater control to a user.

20. Claims 27-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Putman (U.S. Patent 4985813) as applied to Claim 21 above, and further in view of Bartleucci et al. (U.S. Patent 4780621).

21. With regard to Claims 27 and 30-32, Putman discloses the claimed invention as cited above, but does not specifically teach the light emitting means including a first and second set of light emitting diodes (re: Claims 27 and 30) that are not energized at the same time (re: Claim 31), but rather alternatively energized at 150 cycles per second (re: Claim 32).

Bartleucci teaches a lighting system including a first and second set of light emitting diodes that are not energized at the same time, but rather alternatively energized [Column 1, Line 57 – Column 2, Line 13]. Though Bartleucci does not specifically teach the first and second set being alternatively energized at 150 cycles per second, it remains obvious that the frequency may be applied accordingly via triac(s) and oscillator.

It would have been obvious to one ordinarily skilled in the art at the time of invention to modify the light emitting device of Putman to incorporate the first and second sets of light emitting diodes alternatively energized (e.g., 150 Hz), as taught by Bartleucci, for the commonly known benefits associated with LEDs (e.g., long life, durability, low power consumption, efficiency), as well as providing the capability of “exhibiting multiple visual effects” [see Bartleucci: Column 2, Lines 6-8].

22. With regards to Claim 28, Putman discloses the claimed invention as cited above. In addition, Putman teaches the light emitting means illuminating within the infrared spectrum [Column 3, Lines 3-6; Column 4, Lines 8-12].

23. With regards to Claim 29, Putman discloses the claimed invention as cited above. Though Putman does not specifically teach the time delays means delaying the light emitting means from energizing for five seconds, it is considered an obvious matter of design choice since a five second delay is a reasonable time span for the device to be deployed before illuminating.

24. Claims 33-36, 40-43, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Putman (U.S. Patent 4985813).

Since Claims 33-36, 40-43, and 48 are method claims reciting the structural limitations of Claims 1-3, 6-9, and 14, the prior art of Putman is an obvious teaching over the scope of the present claims. It has been held an obvious matter that when all structural limitations of an apparatus have been satisfied by the prior art, one of ordinary skill in the art could construct a method of use for said apparatus.

25. Claims 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Putman (U.S. Patent 4985813) as applied to Claim 33 above, and further in view of Green, Sr. (U.S. Patent 6117030)

Since Claims 37-38 are method claims reciting the structural limitations of Claims 4-5, the prior art of Putman is an obvious teaching over the scope of the present claims. It has been held an obvious matter that when all structural limitations of an apparatus

have been satisfied by the prior art, one of ordinary skill in the art could construct a method of use for said apparatus.

26. Claims 39 and 44-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Putman (U.S. Patent 4985813) as applied to Claim 33 above, and further in view of Bartleucci et al. (U.S. Patent 4780621).

27. With regard to Claims 39 and 45-47, Putman discloses the claimed invention as cited above, but does not specifically teach the light emitting means including a first and second set of light emitting diodes (re: Claims 39 and 45) that are not energized at the same time (re: Claim 46), but rather alternatively energized at 150 cycles per second (re: Claim 47).

Bartleucci teaches a lighting system including a first and second set of light emitting diodes that are not energized at the same time, but rather alternatively energized [Column 1, Line 57 – Column 2, Line 13]. Though Bartleucci does not specifically teach the first and second set being alternatively energized at 150 cycles per second, it remains obvious that the frequency may be applied accordingly via triac(s) and oscillator.

It would have been obvious to one ordinarily skilled in the art at the time of invention to modify the light emitting device of Putman to incorporate the first and second sets of light emitting diodes alternatively energized (e.g., 150 Hz), as taught by Bartleucci, for the commonly known benefits associated with LEDs (e.g., long life, durability, low power consumption, efficiency), as well as providing the capability of “exhibiting multiple visual effects” [see Bartleucci: Column 2, Lines 6-8].

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28. With regards to Claim 44, Putman discloses the claimed invention as cited above. Though Putman does not specifically teach the time delays means delaying the light emitting means from energizing for five seconds, it is considered an obvious matter of design choice since a five second delay is a reasonable time span for the device to be deployed before illuminating.

29. Claims 51-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Putman (U.S. Patent 4985813) as applied to Claim 33 above, and further in view of AAPA (Applicant's Admitted Prior Art).

Since Claims 51-53 are method claims reciting the structural limitations of Claims 17-19, the prior art of Putman is an obvious teaching over the scope of the present claims. It has been held an obvious matter that when all structural limitations of an apparatus have been satisfied by the prior art, one of ordinary skill in the art could construct a method of use for said apparatus.

30. Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over Putman (U.S. Patent 4985813) as applied to Claim 33 above, and further in view of Bischoff, Jr. (U.S. Patent 6158882).

Since Claim 54 is a method claim reciting the structural limitations of Claim 20, the prior art of Putman is an obvious teaching over the scope of the present claims. It has been held an obvious matter that when all structural limitations of an apparatus have been satisfied by the prior art, one of ordinary skill in the art could construct a method of use for said apparatus.

31. Claim 55, 58, and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Putman (U.S. Patent 4985813).

Since Claim 55 is a method claim reciting the structural limitations of Claim 21, the prior art of Putman is an obvious teaching over the scope of the present claims. It has been held an obvious matter that when all structural limitations of an apparatus have been satisfied by the prior art, one of ordinary skill in the art could construct a method of use for said apparatus.

32. With regards to Claim 58, Putman discloses the claimed invention as cited above. In addition, Putman teaches a battery storage compartment [Figure 4] contained within the housing, but does not specifically teach said storage compartment having a nine volt battery disposed therein.

However, a 9 volt DC battery is considered an obvious design choice, since it is commonly known that said 9 volt DC battery would be a sufficient source for powering the light emitting diodes. In addition, the battery [Figures 1-4: (27)] disposed within the battery storage compartment depicted in Putman resembles a typical 9 volt battery.

33. With regards to Claim 62, Putman discloses the claimed invention as cited above. In addition, Putman teaches the light emitting means illuminating within the infrared spectrum [Column 3, Lines 3-6; Column 4, Lines 8-12].

34. Claims 59-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Putman (U.S. Patent 4985813) as applied to Claim 55 above, and further in view of Green, Sr. (U.S. Patent 6117030)

Since Claims 59-60 are method claims reciting the structural limitations of Claims 25-26, the prior art of Putman is an obvious teaching over the scope of the present claims. It has been held an obvious matter that when all structural limitations of an apparatus have been satisfied by the prior art, one of ordinary skill in the art could construct a method of use for said apparatus.

35. Claims 61 and 63-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Putman (U.S. Patent 4985813) as applied to Claim 55 above, and further in view of Bartleucci et al. (U.S. Patent 4780621).

Since Claims 61 and 63-66 are method claims reciting the structural limitations of Claims 27-32, the prior art of Putman is an obvious teaching over the scope of the present claims. It has been held an obvious matter that when all structural limitations of an apparatus have been satisfied by the prior art, one of ordinary skill in the art could construct a method of use for said apparatus.

Allowable Subject Matter

36. Claims 15-16, 22-23, 49-50, and 56-57 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

37. The following is a statement of reasons for the indication of allowable subject matter:

With regard to Claims 15-16 and 49-50, the Applicant has sufficiently recited subject matter that reads over the prior art of record, which fails to teach or suggest a

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transparent spherical light emitting device including a circuit having means for ascertaining if a battery voltage within said device is less than 7 volts.

With regard to Claims 22-23 and 56-57, the Applicant has sufficiently recited subject matter that reads over the prior art of record, which fails to teach or suggest a transparent spherical light emitting device including a circuit board having a rectangular opening located approximately in the mid-section thereof for receiving a battery storage compartment.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following references are cited to further show the state of the art pertinent to the current application, but are not considered exhaustive:

US Patent 3610916 to Meehan;

US Patent 4801141 to Rumsey;

US Patent 5670942 to Lewis;

US Patent 6428432 to Kachel;

US Publication 2005/0094395 to Rosenberg.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Han whose telephone number is (571) 272-2207. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMH (1/19/2006)



ALAN CARIASO
PRIMARY EXAMINER